facing up to MIXED RHYTHMS

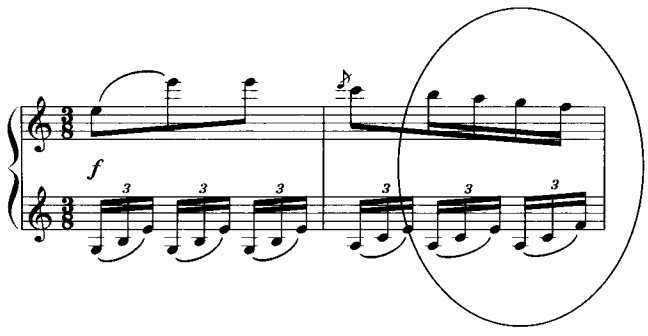
Part I

BY JOSEPH SMITH

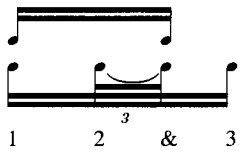
Despite the fact that musical relationships—intervallic, harmonic and rhythmic—can be expressed numerically, not all musically gifted individuals are facile with math. (As a schoolboy, how I hated being told that because I was "musical," I ought to enjoy math!) It is true, though (however distasteful), that one can best solve certain musical problems by means of a cold-blooded numerical analysis. One can learn to execute mixed rhythms in an accurate and natural-sounding manner, for example, through just such an approach. We have "mixed rhythms" when a single space of time is subdivided simultaneously into both odd- and even-numbered groups of notes, such as two-against-three, or into different odd-numbered groups, such as three-against-five. (I avoid the common term "polyrhythm" intentionally, because it is applied to many types of rhythmic combinations other than the ones discussed here.) The piano literature of all periods abounds in these tricky mixed rhythms.

Two-against-three

Two-against-three is the most common and the simplest of these mixtures. Let's begin by regarding the "three" as the predominant meter and fitting the "two" into it. (It is true of mixed rhythms in general that, when musical context permits, it is easier to fit the smaller group into the larger group than vice versa).

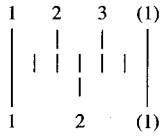


Obviously, the first notes of the two groups fall simultaneously on "one." The second note of the duplet falls halfway through the second note of the triplet. Therefore, we need only subdivide the second note of the triplet into halves by counting "and." It is on this "and" that the second note of the duplet falls.

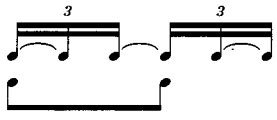


The correct counting of this pattern, however, will not guarantee a convincing execution of the rhythmic combination—sometimes, in an actual piece of music, even when the two-against-three is played with complete metric accuracy, it still stubbornly fails to produce the desired effect of two independent rhythms. One may have the frustrating impression that it sounds wrong because it is being played too accurately! In such a case, one must look to the dynamics as well as the timing: the very act of "placing" the second note of the duplet can easily mislead a pianist into playing it in a louder, more marked way than is appropriate to its place in the melody, sabotaging the flow of the duplet line.

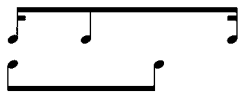
Although we can now superimpose two on a pattern of triplets, we have not yet disposed of two-against-three: we must still address the more complicated problem of superimposing three against a previously established pulse of duplets. At this point, a diagram or grid may be useful. We multiply the numbers two and three to get six—the smallest number that can be divided by each (the "lowest common denominator" which bored us in grade school), allowing us to arrange it in three groups of two (in the example, marked above) and two groups of three (below).



Translated into notation, this is:

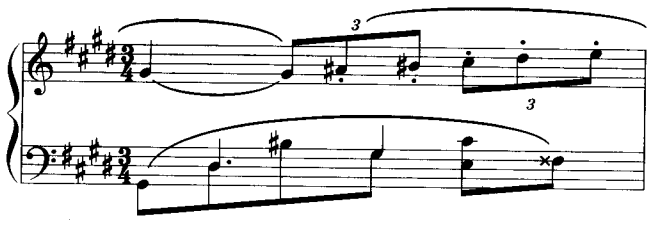


Those inexperienced in this rhythm will have to fight a near universal tendency to play the second note of the triplet early and, especially, to play the third note late, which distorts the triplet towards:

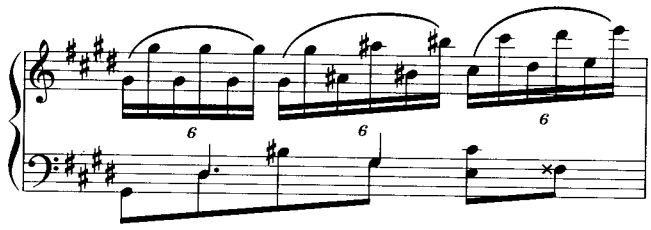


Sometimes, once we understand a rhythmic combination intellectually, making a paraphrase of a passage can help us hear and feel it rather than calculate it. A passage

from Chopin's Polonaise in C sharp minor provides an illustration:



In this paraphrase, the thumbs of the right hand sound Chopin's melody notes in the correct octave at the correct time—we have simply substituted a regular rocking motion of the hand for numerical counting:



This article will be continued in the next issue.

Adding Notes *continued*

predestined!—to scandalize some colleagues the next time one of my students performs the *Appassionata Sonata* and changes some of the figuration in the repetitions of the middle movement. At the very least, noticeable changes of mood, dynamics, and/or articulation must attend every repeat! Why else should we repeat? Don't talk to me about "organic form development," a term German musicologists invented mainly to prove Beethoven's superiority over Schubert (Beethoven had it, Schubert didn't, so the argument goes). I find no merit in repeating, with exactly the same expression, just so the form can "develop organically." And while I'm on the topic of Schubert, go, Robert Levin!! Surely Schubert's music can be ornamented, filled out, dressed up, as the occasion warrants, according to the talent and whim—yes, whim!!—of the interpreter.

It goes without saying that it is possible to ornament music badly, that one can all too easily deny Mozart's twin dicta of *Geschmack* and *Empfindung*. It is obvious when we hear someone play with *taste* and *feeling*. Nat "King" Cole (1917-1965) comes quickly to mind. Daniel Steibelt (1765-1823), and far too many among the living, on the other hand, are examples of what Mozart hated. Lacking taste and feeling, a performer could never animate a score to Mozart's satisfaction, no matter how dazzling his technique or showmanship. Clearly, mere drama and liveliness will not make us great interpreters (though my invitation to my wife, Mari Pino, to play tambourine during my concerts, as Mrs. Steibelt did, still holds).

In this essay, I will not list chronologically every great composer, demonstrating where I'd change or add notes (since I could probably come up with a list longer than the Bible). But I would like to include remarks on two composers whose works we never hear ornamented: Chopin and Ravel. I remember learning Chopin's B Major Nocturne, Op. 9 No. 3 long ago. Believing in the sanctity of absolute textual faithfulness, I tried hard to remember the subtle differences among the piece's five statements of the main theme. I ended up photocopying those statements and taping them alongside each other on one page, so I could more clearly see the divergences and come up with mnemonic means of memorizing them. ("This one is straight and direct. This one slithers down chromatically in quintuplets." And so on.) I do not remember if my final performances of that work corresponded note for note with the printed score, or, even more sadly, if my playing conveyed the improvisatory delight Chopin must have had when he first penned those variants. But I do know now that, were I to play that piece today, I would come up with some of my own possible variants, worry more about playing beautifully and with imagination, and worry less about a perfect recitation of the published text.

Herbie Hancock's recorded version of the slow movement of Ravel's G Major Concerto (on the CD *Gershwin's World*) also comes close to hitting the nail on the head in his improvised fiorituras. It helps that Hancock's voicings from the world of post-bop coincide with Ravel's harmonic language. (I hope somebody will write an essay someday exploring the relations between twentieth-century French composers and post-1945 jazz musicians in America.) I don't know if Ravel would have approved of Herbie's flights of fancy, but, frankly, I don't care. While unorthodox, this performance is alive, authentic, immediate, and unique—all the things that make a musical interpretation worthwhile.

I am certainly not suggesting that we need to tamper with the notes of every work we encounter. The spirit of improvisation, necessary in every great performance, can take many forms. But I believe it is time to loosen the strictures of perfectionism (a euphemism for literalism, after all) that have gradually eviscerated the interpreter's art in this age of "note-perfect" recordings and competitions, and to reemphasize the beautiful, the imaginative. ■

Part II of this article will focus on creating variants in the repeat sections of Bach's Partita in B Flat.

This article is adapted from one that first appeared on the internet magazine Piano Pedagogy Forum, *Vol. 3 No. 1, Jan. 2000 (www.music.sc.edu/departments/piano/ppf/). Pianist John Salmon, on the faculty of the University of North Carolina at Greensboro since 1989, plays both classical music and jazz and regularly inflicts the kind of heresy found in this article on his students. He often "adds" notes in his piano concerto performances (almost as creatively, he says, as he "drops" them). As a particular advocate of the concert music of Dave Brubeck, he has recorded the compact disc* John Salmon Plays Brubeck Piano Compositions *(Phoenix PHCD 130).*

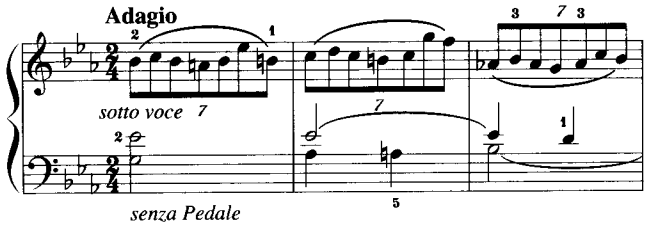
facing up to MIXED RHYTHMS

Part II

BY JOSEPH SMITH

Two-against-any-odd number

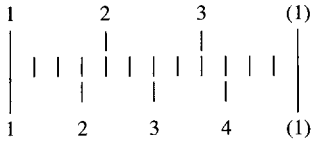
By solving the problem of playing two against three, we have virtually solved any situation of two against an odd number where that odd number is the previously established pulse. The first note of the duplet will, as always, come simultaneously with the first note of the odd grouping, and the second note of the duplet will come in the middle of the odd grouping. For instance, in the two-against-seven in the opening of "Eusebius" from Schumann's *Carnaval.*



The second note in the left hand will come on the "and" between counts four and five. (Wait a minute! If half of seven is three and a half, why does it come after "four" rather than "three?" Remember, each number we count marks merely the beginning point of a unit of duration—we count "one" before a full beat has been sounded. Thus the count of "four" marks the ending of the third beat, and the note halfway between the fourth and fifth follows this count of four, after the *completion* of the third beat. Whew!)

The grid technique

The grid technique touched on last time in the discussion of two-against-three can help us figure out any mixed rhythm. However, I think the reader will find it clearer if I apply the technique to another specific example—three-against-four—before I generalize. First, the numbers of the two divisions, three and four, must be multiplied. Then, we need to make the resulting number of marks, twelve, plus one extra to define the end of the group. Above, the twelve *spaces* are divided into three groups of four; below, into four groups of three.



Because twelve, the lowest common denominator, is divided into equal parts both above and below, the grid reads the same from right to left as from left to right—as Nicolas Slonimsky would say, it is palindromic. This has the happy result that one may, quite literally, turn it upside down; the grid for three in the right hand over four in the left, can be inverted to serve as four in the right hand over three in the left.

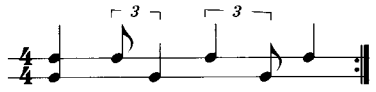
Stated as a general formula, we can take any two numbers, A and B, multiply them to get the lowest common denominator C, and make this number of marks, adding one extra mark to show the end of the last space. Above, we can show A groups of B, below, B groups of A, or vice versa. This "vice versa" can also be obtained by turning the page upside down.

Three-against-four

The three-against-four rhythm is common enough (and tricky enough) that it is worth not only figuring out, but memorizing in both the form of three-against-four and four-against-three. First, review the grid for this mixed rhythm, where four is the predominant pulse (above).

Now, translated into notation, here is a *combined* rhythm of three against four (in other words, the rhythm that would result if all the taps of three-against-four were executed by one hand).

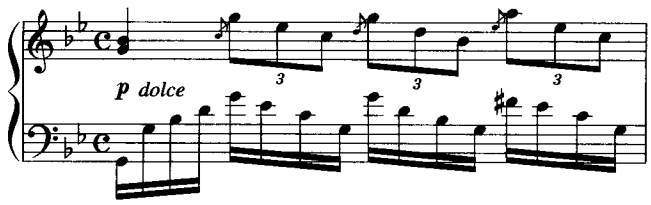
First, I suggest simply tapping it out until it is internalized. Once this is securely remembered, the next step is to divide the identical rhythm between the hands thus:



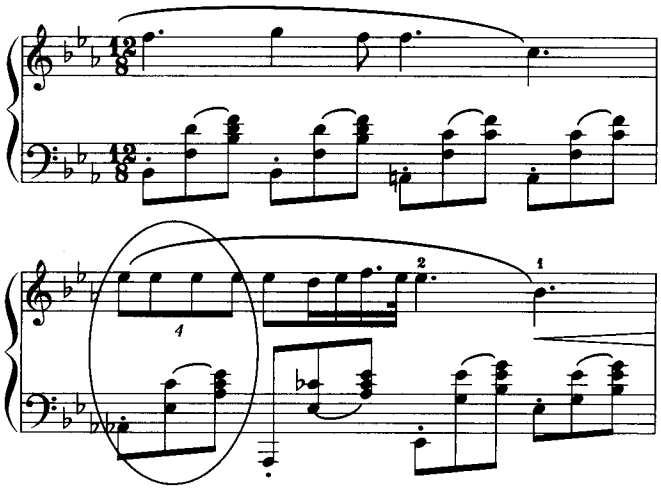
with, af - ter, three, be - fore

(Because the phrases "in one hand... in the other hand" might be confusing, I have arbitrarily assigned "four" to the right hand, and "three" to the left. You may, of course, reverse these.) Again, it is not yet necessary to hear it as three-against-four, but only to practice the example until it comes naturally. Notice that the left hand comes right on the first beat, after the second beat, and before the fourth beat. Reciting the formula "with, af-ter,

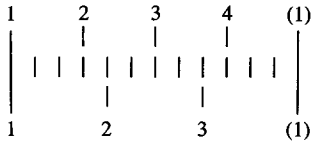
(three), be-fore" in time may help you to memorize the rhythm. It may already be apparent that the right hand is tapping four equal beats to the bar, but observe as well that the left hand is likewise striking at regular intervals, three to a bar. This, then, is the notorious three-against-four. Now you can apply it to the following example (from Brahms's *Handel Variations*).



The following elusive example is from Chopin's beloved early E flat Nocturne:

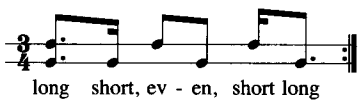


Here, the 12/8 meter establishes three rather than four as the predominating rhythm. Here is the grid:



(This is example 9 turned upside down.) In such cases (which appear far less frequently), first practice this combined rhythm:

Now divide it between the hands like this:

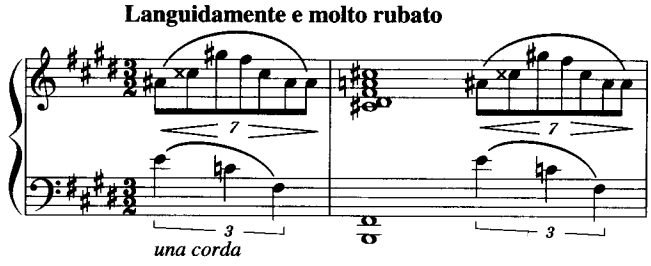


Reciting these words in time provides a memory aid: long-short, ev-en, short-long.

But, the reader may have already asked, is it always necessary to hear the three-against-four in order to execute it correctly? For instance, to pick a well-known example, in the fast tempo of Chopin's beloved *Fantaisie-Impromptu*, cannot one simply allow the motion of the left hand to divide the beats into triplets? Certainly, this tactile "rippling" is the end result. Even in this example, however, I believe there is a benefit to be derived from actually having made the mixed rhythm conscious: only in this way can we practice hands together slowly. Also, when we rely solely on tactile rippling, we are loath to let the tempo fluctuate, fearing that we will lose control of the rhythm, and this insecurity limits our expressive possibilities.

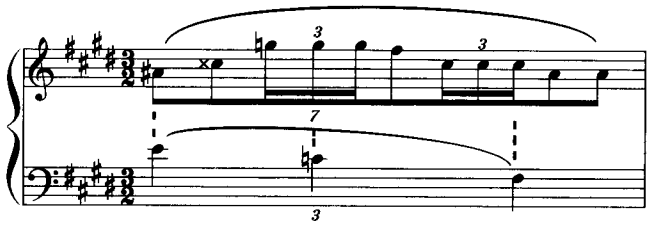
Other Combinations

To prove that the grid technique can be applied to any mixed rhythm, let's take a more exotic specimen—the three-against-seven that opens Griffes's "The White Peacock":



Here is the grid—21 units divided on top into seven groups of three, on the bottom, into three groups of seven:

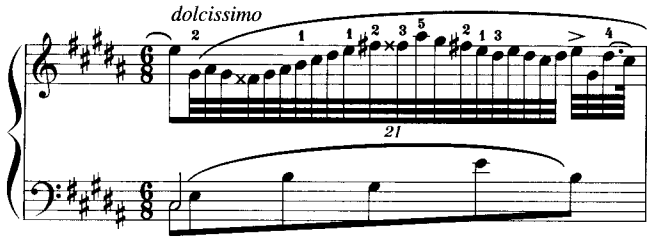
We prefer, as always, to consider the larger number as the predominating pulse, since it is considerably easier to keep track of triplet rhythms than of septuplet rhythms. In this case, fortunately, because the mixed rhythm begins the piece, and because the real pulse is neither triplets nor septuplets, we have the option of choosing. (The grid will be much clearer than the following sentences, but, for the sake of completeness...) It can be seen that, as always, the first notes of both divisions fall on "one," and the second of the group of three notes falls after the third of the group of seven. The last note of the group of three falls before the sixth note of the group of seven. Placing the "after" and "before" exactly will require us to count (eventually to feel) a triplet pulse on some of the septuplet notes, and it may in fact be easier to regard all seven as triplets:



continued on page 58

Mixed Rhythms *continued*

I should add a word about the many examples in Chopin where a large and usually odd-numbered group of notes in the right hand is played over an accompanying figure in the left hand. Often, these flourishes, an equivalent to vocal embellishment in the Rossini-Bellini era, appear in small type, and with no numeral above. The small notes indicate that the notes are not strictly metered. Even in cases where notes in such passages are written full-sized and Chopin does give a numeral, such as in his first B major Nocturne,



we may infer that these notes are not to be evenly distributed, but played with improvisational freedom. These are not, therefore, genuinely mixed rhythms, and not even I am fanatic enough to suggest the absurdity of applying the grid technique to them! ■

Paderewski *continued*

debut in Paris, and soon conquered England. Under the auspices of the Steinway piano firm, he sealed his fame with a triumphant American tour.

To the millions of American Poles who looked up to him, he became the symbol of their unfortunate country, and he used his magnetic gift as an orator to raise great amounts of money to help his nation. By the Great War's end Paderewski was not only a Polish hero but a world leader, becoming Premier of a Free Polish Republic in January 1919, and signing for his country at the Versailles Peace Conference.

After nearly two years as Premier, he stepped aside in December 1920 and resumed his world tours. Paderewski was now more than a pianist, he had become a humanitarian and a beloved inspirational force. In September 1939, Poland's downfall brought the exhausted pianist to the United States where he was able to provide continuing and valuable service to his country. The man who had earned millions had given it away in cause after cause, and he died almost penniless. President Roosevelt, a great admirer, gave him a hero's funeral at Washington's Arlington National Cemetery.

The *Chant D'Amour* presented on page 15 is a little-known early work by this monumentally important figure. ■

Piano Today Advisory Board Member Named Executive Director Of Jazz At Lincoln Center

Composer Bruce MacCombie, a member of *Piano Today*'s Artist Advisory Board, has left his position as Dean of the School for the Arts at Boston University to assume the position of Executive Director of Jazz at Lincoln Center. Watch for a discussion with him about the state of jazz and of music education soon in these pages.